Story submitted by Charlene Miller, Extension Director November 10, 2020



## **Proper Handling and Administration of Cattle Health Products part 2.**

Last week's article started a series on Proper Handling and Administration of Cattle Health Products. The last article talked about vaccine handling and storage. If you missed it, you can find it on both our website <a href="https://www.butler.ksu.edu">www.butler.ksu.edu</a> and our K-State Research and Extension/Butler County Facebook page. This week we are going to talk about syringe care, needles and injection sites.

## **Syringe Care**

Clean hot water and a brush is a good way to clean a syringe. Take apart the syringe and wash. Do NOT use soap as it leaves a residue on the inside and affects the product you plan to use next. VERY hot water is best. When taking the syringe apart make sure to inspect the rings and inside of the syringe; replace any necessary parts. Lubricating with silicone, mineral oil, Vaseline or any other lubricant may inactivate and damage vaccines. Fill a small container with hot water; if you have hard water or the source is non potable, use distilled water. Draw hot water into syringe and then squirt out. Repeat at least 3 times. If you need to use the syringe again before storing, make sure the syringe is cool before reusing. After the syringe is *completely* dry, put in a clean Ziploc bag/rubber container/etc. and store.

## <u>Needles</u>

Needles should be changed if: they bend, becomes contaminated (examples include dirt, feces, chemicals), the point becomes damaged or burred, before needles become dull (minimum 10-15 head – or every time you refill the syringe), and between cattle to limit blood-borne infections (such as bovine leucosis, anaplasmosis). Don't forget to change the needle before re-entering a vaccine. Only clean needles should be used when entering bottles.

## **Injection Site Management**

Injections should be given subQ when possible per BQA standards. Where they are given is very important. There is a triangular region in the neck that is recommended. Multiple great resources exist that show the triangular region. We

Skin
Subcutaneous tissue
Muscle

want to make sure to stay in front of the point of the shoulder, below the nuchal ligament and above the vertebrae. When giving SubQ shots, one handed technique is best. You should come in at a 45-degree angle from perpendicular. When we come in at an angle you go through the hide and you can tent the skin with the tip of the needle. When done properly, the needle should move freely under the skin. Make sure to read the label carefully and give the vaccine SubQ or IM per label requirements. Here is an image showing the different layers. Next week, the last of the series will discuss needle size, injection spacing and volume and implants. If you have any questions, we can be reach at (316) 321-9660 or cmmiller1@ksu.edu.